

**IN THE CLAIMS:**

**Please amend the claims as follows:**

1 (Currently Amended). A method for dynamically configuring a tunnel comprising:

initiating, by a first peer, a negotiation with a second peer, the negotiation including a plurality of security configuration proposals;

sending, by the second peer, information to the first peer;

extracting, by the first peer, a security configuration selected from among the plurality of security configuration proposals from the information sent by the second peer; and

establishing, using the security configuration, a tunnel between the first peer and the second peer,

wherein the first peer orders the plurality of security configuration proposals such that a more secure security configuration proposal is offered before a less secure security configuration proposal.

2 (Original). The method of claim 1, wherein the negotiation utilizes the configuration mode exchange extension of the IPSec protocol.

3 (Original). The method of claim 1, wherein the establishing a tunnel

includes conducting a phase2 negotiation in the IPSec protocol.

4 (Original). The method of claim 1, further comprising initiating, by the first peer, a preliminary negotiation with the second peer.

5 (Original). The method of claim 4, wherein the initiating a preliminary negotiation includes conducting a phase1 negotiation in the IPSec protocol.

6 (Previously Presented). A method for dynamically configuring a tunnel comprising:

initiating, by a first peer, a negotiation with a second peer, the initiating comprising offering, by the first peer to the second peer, at least one security configuration proposal supported by the first peer,

wherein the first peer orders offered security configuration proposals in a transmission packet such that a more secure security configuration proposal is offered before a less secure security configuration proposal;

extracting, by the first peer, a selected security configuration from information sent by the second peer; and

establishing, using the security configuration, a tunnel between the first peer and the second peer.

7 (Original). The method of claim 6, wherein the tunnel is an IPSec tunnel.

8 (Original). The method of claim 6, wherein the negotiation utilizes the configuration mode exchange extension of the IPSec protocol.

9 (Original). The method of claim 6, wherein the initiating comprises requesting, by the first peer, that the second peer send information, the information including policy information to define a subsequent negotiation between the first peer and the second peer.

10 (Original). The method of claim 9, wherein the policy information defines one or more security associations.

11 (Original). The method of claim 10, wherein the information sent by the second peer comprises sets of attributes, the attributes including security parameters and network addresses.

12 (Original). The method of claim 6, wherein the establishing a tunnel comprises negotiating, by the first peer with the second peer, to generate a secure key.

13 (Original). The method of claim 12, wherein the negotiating to generate a secure key includes conducting a phase2 negotiation in the IPSec protocol.

14 (Original). The method of claim 6, wherein the establishing a tunnel utilizes the quick mode exchange of the IPSec protocol.

15 (Original). The method of claim 6, wherein the IP address of the second peer is accessible to the first peer.

16 (Original). The method of claim 15, wherein a shared secret is stored on the first peer before the negotiation.

17 (Cancelled).

18 (Cancelled).

19 (Previously Presented). The method of claim 6, wherein the negotiation utilizes the base mode exchange extension of the IPSec protocol.

20 (Previously Presented). The method of claim 6, wherein the initiating a negotiation further comprises sending, by the first peer to the second peer, the identity of the first peer.

21 (Previously Presented). The method of claim 6, wherein the initiating a

negotiation includes conducting a phase1 negotiation in the IPSec protocol.

22 (Previously Presented). The method of claim 6, wherein the negotiation utilizes one of main mode and aggressive mode of the IPSec protocol.

23 (Currently Amended). A method for dynamically configuring a tunnel comprising:

    sending, by a second peer, information to a first peer that initiated a negotiation with the second peer, the information including a security configuration selected from among a plurality of security configuration proposals offered by the first peer; and

    establishing, using the security configuration, a tunnel between the first peer and the second peer,

wherein the first peer orders the plurality of security configuration proposals such that a more secure security configuration proposal is offered before a less secure security configuration proposal.

24 (Cancelled).

25 (Currently Amended). A system for dynamically configuring a tunnel comprising:

    a first peer; and

a second peer configured to communicate with the first peer over a network connection,

wherein the first peer is configured to initiate a negotiation with the second peer, wherein the negotiation includes a plurality of security configuration proposals;

the second peer is configured to send information to the first peer,

the first peer is configured to extract a security configuration selected from among the plurality of security configuration proposals from the information sent by the second peer, and

the first peer and the second peer are configured to establish a tunnel therebetween using the security configuration,

wherein the first peer orders the plurality of security configuration proposals such that a more secure security configuration proposal is offered before a less secure security configuration proposal.

26 (Original). The system of claim 25, wherein the tunnel is an IPSec tunnel.

27 (Currently Amended). A computer-readable medium encoded with a plurality of processor-executable instruction sequences for:

initiating, by a first peer, a negotiation with a second peer, the negotiation including a plurality of security configuration proposals;

extracting, by the first peer, a security configuration selected from

among the plurality of security configuration proposals from information sent

by the second peer; and

establishing, using the security configuration, a tunnel between the first

peer and the second peer,

wherein the first peer orders the plurality of security configuration proposals such that a more secure security configuration proposal is offered before a less secure security configuration proposal.

28 (Original). The computer-readable medium of claim 27, wherein the negotiation comprises a request/reply negotiation, wherein the first peer requests that the second peer send the information, and the second peer replies to the request by sending the information to the first peer.

29 (Cancelled).

30 (Cancelled).

31-34 (Cancelled).